

U.S. DEPARTMENT OF COMMERCE
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PB-260 128

MUNICIPAL AND INDUSTRIAL WASTE FACILITIES (1957
INVENTORY). A COOPERATIVE STATE-FEDERAL REPORT.
DRAINAGE INTO THE ST. LAWRENCE RIVER FROM NEW YORK

PUBLIC HEALTH SERVICE
WASHINGTON, D. C.

APRIL 1960

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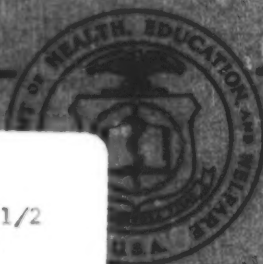
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MUNICIPAL AND INDUSTRIAL WASTE FACILITIES

*A Cooperative
State-Federal Report*

**Drainage into the St. Lawrence River
from New York**



U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service

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BIBLIOGRAPHIC DATA SHEET	1. Report No.	2.	3. Recipient's Accession No. PB-260 128
4. Title and Subtitle Municipal and Industrial Waste Facilities (1957 Inventory). A Cooperative State-Federal Report. Drainage into the St. Lawrence River from New York.		5. Report Date Apr 60	
		6.	
7. Author(s)		8. Performing Organization Rept. No. PHS-Pub-622	
9. Performing Organization Name and Address Public Health Service, Washington, D. C. Div. of Water Supply and Pollution Control.		10. Project/Task/Work Unit No.	
		11. Contract/Grant No.	
12. Sponsoring Organization Name and Address		13. Type of Report & Period Covered	
		14.	
15. Supplementary Notes			
16. Abstracts This listing includes municipalities and industries which discharge waste waters in the St. Lawrence River directly from the State of New York. It does not include municipalities and industries draining into the Lake Champlain area which ultimately reaches the St. Lawrence. The information has been secured from the State Health Department and Water Pollution Control Agency, and represents conditions as of 1957. While data on municipal waste discharges are relatively complete, information on industrial waste discharge is incomplete.			
17. Key Words and Document Analysis. 17a. Descriptors			
17b. Identifiers/Open-Ended Terms St. Lawrence River New York Municipalities *Wastes (Industrial) Water pollution *Waste water Industrial water 17c. COSATI Field/Group 13B			
18. Availability Statement		19. Security Class (This Report) UNCLASSIFIED	21. No. of Pages 27
		20. Security Class (This Page) UNCLASSIFIED	22. Price

1957 INVENTORY
MUNICIPAL AND INDUSTRIAL WASTE FACILITIES

DRAINAGE INTO THE ST. LAWRENCE RIVER FROM NEW YORK



U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service
Bureau of State Services
Division of Water Supply and Pollution Control
Washington, D. C.
April, 1960

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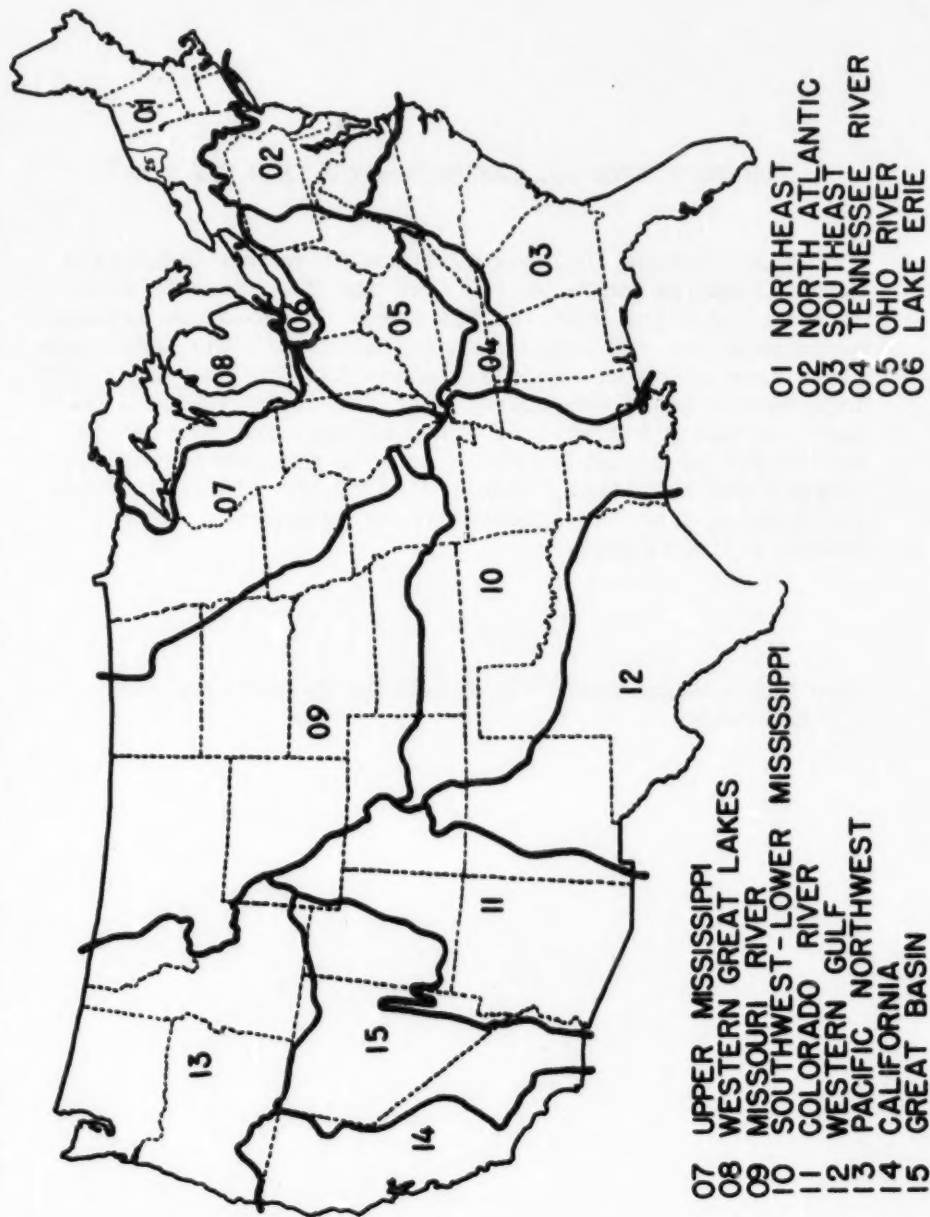
Public Health Service Publication No. 622

DRAINAGE INTO ST. LAWRENCE RIVER FROM NEW YORK*

This listing includes municipalities and industries which discharge waste waters into the St. Lawrence River directly from the State of New York. It does not include municipalities and industries draining into the Lake Champlain area which ultimately reaches the St. Lawrence. The information has been secured from the State Health Department and Water Pollution Control agency, and represents conditions as of 1957. While data on municipal waste discharges are relatively complete as of the time indicated, it is known that the information on industrial waste discharge is incomplete.

*See Map - Major Basin 01, Sub-basin 25 Northeast-St. Lawrence

MAJOR RIVER BASINS OF THE UNITED STATES



NOTE: WITHIN THE NORTHEAST BASIN THE MINOR BASIN 25 DRAINS INTO THE ST. LAWRENCE RIVER

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NOTES REGARDING TABULATIONS

GENERAL

This Inventory contains the latest available data for all sources of pollution, both municipal and industrial, which are of significance in water pollution control programs.

Each individual item listed in column 1 is defined as an "entry".

In the listings, each non-community entry is referred to the nearest community, whenever possible. Entries appear in alphabetical order according to community. Entries listed under the same community are alphabetized by name, under that community.

Following the listing for each State there is a table showing those sewage disposal facilities which serve more than one of the entries, together with the names of all entries which are served by the particular facility.

An "x" in the listings indicates that the data called for are not available. A dash "-" signifies that the data called for do not apply to the entry. An asterisk "*" indicates that a "Remark" is entered in column 16.

COLUMN (1) COMMUNITY, SEWER OR SANITARY DISTRICT, INSTITUTION OR INDUSTRY

Entries marked with a star "*" are disposal facilities which serve one or more additional entries.

The following abbreviations are used.

Auth.	- Authority
Co.	- County, Company
Col.	- College
Comm.	- Commission
D. or Dist.	- District
D. R.	- Dude Ranch
Est.	- Estate
Fed. Hous. Proj.	- Federal Housing Project
F. H. A.	- Federal Housing Administration
Hosp.	- Hospital
Hts.	- Heights
Ind. Res.	- Indian Reservation
Inst.	- Institute, Institution
Jct.	- Junction
Mon.	- Monument

M. U. D.	- Municipal Utility District
M. V.	- Mill Village
Nat.	- National
Penit.	- Penitentiary
P. C.	- Permanent Camp (Recreation, Forest, or other)
Pk.	- Park
P. H. A. or	- Public Housing Administration
F. P. H. A.	- Public Utility District
P. U. D.	- Sanatorium, Sanitarium
San.	- School
Sch.	- Sanitary, Sanitation or Sewer District
S. D.	- Section
Sec.	- Sewer Maintenance District
S. M. D.	- Station
Sta.	- Town or Township
(T), To., Twp.	- University
Univ.	

COLUMN (2) 1950 POPULATION, ESTIMATED POPULATION, NUMBER OF PLANT EMPLOYEES

Top-line Entries

For communities, a top-line entry shows the 1950 population, as reported by the U. S. Bureau of the Census.

For industries a top-line entry denotes the average number of plant employees during a 24-hour period. Seasonal operation is indicated by an "S" following this figure.

Bottom-line Entries

For communities or institutions, estimated population figures (when a reliable estimate is available) are entered on the bottom line, and followed by the last digit of the year of estimate. Thus an entry of 2,500-2 indicates an estimated population of 2,500 in 1952.

COLUMN (3) ESTIMATED POPULATION SERVED

The figure appearing indicates the estimated total number of people served by the facilities. A figure shown in parentheses indicates that the entry is served by the facilities of another entry (the latter being indicated in column 7). The population shown in parentheses is included in that listed under the serving entry.

**COLUMN (4) TYPE SEWER SYSTEM
INDUSTRIAL GROUP
WASTE CLASSIFICATION**

Top-line Entries

For communities, sewer or sanitary districts, and institutions, the type sewer system is coded as follows:

- S - Separate (designed to carry domestic sewage and industrial waste separately from storm water runoff)
- C - Combined (designed to carry domestic sewage, industrial waste, and storm water runoff in the same sewer)

For industries, the Major Industrial Group is shown by number. See Appendix A for code.

Bottom-line Entries

For industries only. The waste classification within the Major Industrial Group is designated by a letter. See Appendix A for code.

COLUMN (5) AVERAGE DAILY FLOW (MGD)

The actual waste flow for the entry. Entered on top line.

For industries the following code letters are entered on the bottom line:

- C - Cooling Water
- P - Process Wastes

CP - Combined flow of cooling water and process wastes

An "E" following the flow figure indicates that the flow has been estimated.

COLUMN (6) DESIGNED FOR

Top-line Entry - PE (1,000's) - The population equivalent, in thousands, for which the facilities were designed.

Bottom-line Entry - Average Daily Flow (MGD) - The flow for which the facilities were designed.

COLUMN (7) TREATMENT

The principal treatment devices and methods are identified by capitalized letters and are further described by subsequent lower case letters. In addition, numbers are used to describe certain types of industrial waste treatment.

In general, the symbols are arranged in the order of sewage flow with sludge treatment symbols following thereafter. Combination units performing more than one function in a single structure are denoted by enclosing the appropriate symbols in parentheses. Enclosures in brackets indicate parallel or alternate operation. Chlorination, where used, is usually noted only once for each plant regardless of whether actual application is made at more than one point.

See Appendix B for code.

COLUMN (8) DISCHARGE TO

The watercourse or land area to which the untreated wastes or treatment plant effluent is discharged.

The following abbreviations are used.

Ar.	- Arroyo
Br.	- Branch, Brook
Ca.	- Canal
Cr.	- Creek
E.	- East
Fk.	- Fork
L.	- Lake
Ld.	- Land
Lt.	- Little
N.	- North
Pd.	- Pond
R.	- River
S.	- South
Str.	- Stream
Trib.	- Tributary
W.	- West
Wa.	- Wash

COLUMN (9) DRAINAGE BASIN: SUB-BASIN

Top-line Entries - The drainage basin in which the entry is located. See Appendix C for code.

Bottom-line Entries - The sub-basin in which the entry is located. See Appendix C for code.

COLUMN (10) WATERCOURSE MILEAGE

For entries discharging either raw or treated sewage into a river system, watercourse

mileages are entered in accordance with the coding system shown in Appendix D.

The column does not apply to entries discharging onto land or into lakes or an ocean. When data appears in this column for such entries, its only purpose is to locate the entry.

COLUMN (11) POPULATION EQUIVALENT (BOD)

Top-line Entries - The Population Equivalent (BOD) of the untreated waste is entered on the top line, and followed by an "E" if estimated.

Bottom-line Entries - The Population Equivalent (BOD) of the treated waste, as discharged to the receiving area, is entered on the bottom line. If estimated, an "E" is added.

Note: When waste discharge is not into a body of water, but is rather onto land or into lagoons from which there is no over-flow, the bottom line entry in this column may be shown in one of two ways:

Some States enter a figure showing the PE (BOD) of the wastes as they are discharged into these land areas or lagoons. Other States enter an "O" to indicate that no waste reaches a water-course. In both cases exactly the same situation exists physically, only the method of describing it differs.

COLUMN (12) and (13) STREAM FLOW FOR DESIGN

These columns are intended to furnish an indication of the most important flow characteristics of the receiving stream which are taken into account, even if only in a general way, in connection with pollution abatement activities.

Column 12 shows the minimum stream flow. In column 13 appears the duration of this flow (top-line entry) and its frequency (bottom-line entry).

In the case of streams which run dry during certain periods the entry in column 12 will be zero.

COLUMN (14) POLLUTION ABATEMENT NEEDS

Symbol	Need	Explanatory Notes
0	New treatment facilities	This symbol indicates the need for a new plant when

Symbol Need

Explanatory Notes

a "None" appears in column 7. For industries this symbol may alternatively indicate the need for other pollution control measures* when a "None" appears in column 7. (Compare the use of this symbol with use of symbol "4" below).

1 Enlargement of existing facilities

This symbol indicates a need for enlargement of the existing treatment plant shown in column 7. For example, addition of another filter to a trickling filter plant. For industries this symbol may alternatively indicate the need for expansion of other pollution control measures* which are shown in column 7.

When this symbol is used it indicates that the degree of treatment or the type of pollution control measures in use are considered to be adequate.

2 Addition of other treatment methods to existing facilities

This symbol indicates a need for addition of other treatment methods to the treatment plant shown in column 7. For example, the addition of trickling filters to a primary treatment plant. For industries this symbol may alternatively indicate the need for additional types of other pollution control measures* besides those shown in column 7.

When this symbol is used the degree of treatment or the type of pollution control measures in use are not considered to be adequate without supplementation.

3 Chlorination

This is a specific requirement coming under symbol "2" above. It may be used either in conjunction with that symbol (as when chlorination plus other additions are needed), or in place of it (as when chlorination only is needed).

4 Replacement of existing plant

This symbol indicates a need for replacement of the existing treatment plant shown in column 7. For industries this symbol may alternatively indicate the need for replacement of the other pollution control measures* which are shown in column 7.

"Replacement" means that the plant or pollution control measures replaced will no longer be used. It is possible that this replacement may be by a plant or by pollution control measures providing the same degree of treatment as those which are replaced. This symbol provides for recognition of the fact that pollution reduction has been provided for, but that due to obsolescence, or for any other reason, the existing facilities are no longer capable of producing satisfactory results.

5 Improved operation or utilization of existing facilities

6 Connection to adequate existing sewer system

7 No project needed

*The term "Other Pollution Control Measures" includes all actions taken to reduce, eliminate, or prevent the discharge of industrial wastes, when such actions cannot be classified as provision of a "treatment plant" in the commonly understood sense of the term.

Typical examples of such measures are: burning or otherwise disposing of sawdust by a sawmill so as to prevent its entry into the stream; general good housekeeping practices by industry; use of oil separators and drip pans by an oil refinery; institution of wastes recovery or by-products processes which eliminate or reduce industrial wastes.

COLUMN (15) DOWNSTREAM WATER USE

Shown in this column are primary existing water uses (entered on top line), together with those anticipated in the foreseeable future (entered on bottom line), within the area affected by the wastes discharged.

The following code is used:

- A - Source of domestic water supply
- B - Source of industrial water supply
- C - Livestock water supply
- D - Irrigation water supply
- E - Commercial fishing
- F - Game fishing
- G - Shellfish
- H - Wildlife
- I - Bathing
- J - Other recreation
- K - Navigation
- L - Waste transportation
- N - Nuisance conditions exist

Capital letters indicate those uses for which the stream is at present satisfactory. Lower-case letters indicate those uses for which the stream is at present unsatisfactory. In some cases, no indication has been given as to whether or not the stream is satisfactory or unsatisfactory for the uses shown. Such cases are indicated by a notation in the "Remarks" column.

COLUMN (16) REMARKS

Any pertinent remarks relating to the entry appear in this column.

APPENDIX A

Major Industrial Groups and Waste Classification Groups

This appendix defines the major industrial groups with which the inventory is concerned. Description of each group follows, in general, that given in the Standard Industrial Classification Manual, Vols. I and II, Bureau of the Budget, November 1945. Certain modifications of some groups have been made. Such modifications are shown in the following table.

Major Group Number Given in This Appendix	Major Group Number Given in Std. Industrial Classification Manual
---	---

Non-manufacturing Industries

10	Includes	10
11	"	11, 12

Appendix A (Cont'd.)

Major Group Number Given in This Appendix	Non-manufacturing Industries (cont'd.)
---	--

13	Includes 13
14	" 14

Manufacturing Industries

20	Includes 20
22	" 22
24	" 24, 25
26	" 26
28	" 28 (except industry 2824, synthetic rubber)
29	" 29 (and industry 4925)
30	" 30 (and industry 2824 from group 28)
31	" 31
33	" 33
34	" 19, 34, 35, 36, 37
39	" 21, 23, 27, 32, 38, 39

A breakdown has been made for each group for waste classification purposes.

NON-MANUFACTURING INDUSTRIES

Major Group Number	Description of Group
--------------------	----------------------

10 Metal Mining

Includes establishments primarily engaged in mining, developing mines, or exploring for metallic minerals (ores). These ores are valued chiefly for the metals contained to be recovered for use as such or as constituents of alloys. In addition, ores of rare-earth metals and titanium are included. This major group also includes all ore dressing and beneficiating operations whether performed at mills operating in conjunction with the mines served or at mills, such as custom mills, operated separately. These include mills which crush, grind, wash, dry, sinter, or leach ore, or perform gravity separation or flotation operations.

A - Ore dressing

11 Anthracite, Bituminous Coal, and Lignite Mining

Includes establishments primarily engaged in producing anthracite (hard coal),

Appendix A (Cont'd.)

Major Group Number	Description of Group
--------------------	----------------------

11 Anthracite, Bituminous Coal, and Lignite Mining (cont.)

bituminous coal or lignite. Mining operations, dredging operations, and preparation plants, such as cleaning plants, breakers, and washeries, whether or not such plants are operated in conjunction with the mines served, are included.

A - Coal Washing
B - Acid Mine Drainage

13 Crude Petroleum and Natural Gas Extraction

Includes establishments primarily engaged in producing crude petroleum, natural gas, natural gasoline, and cycle condensate. Types of activities included are exploration, drilling, well operation and maintenance, and the operation of natural gasoline and cycle plants. The group includes emulsion breaking and desilting of crude petroleum performed to render the oil marketable.

A - Oil field brines
B - Petroleum

14 Mining and Quarrying of Nonmetallic Minerals, Except Fuels

Includes establishments primarily engaged in mining or quarrying, developing mines, or exploring for nonmetallic minerals, except fuels.

MANUFACTURING INDUSTRIES20 Food and Kindred Products

Includes establishments manufacturing foods and beverages for human consumption, and certain related products such as manufactured ice, chewing gum, and prepared feeds for animals and fowls.

A - Sugar refining, beet or cane
B - Canning, dehydrating, or freezing fruits
C - Canning, dehydrating, or freezing vegetables
D - Canning and curing fish and other sea foods
E - Slaughtering

Appendix A (Cont'd.)

Major
Group
NumberDescription of Group20 Food and Kindred Products
(contd.)

- F - Meat Packing
- G - Poultry killing and cleaning
- H - Milk receiving and/or bottling
- I - Cheese factory
- J - Milk condensery and/or dry milk plant
- K - Ice cream plant
- L - Creamery
- M - Malt liquor manufacture
- N - Winery
- O - Distillery
- P - Rendering plant
- Q - Vegetable oil manufacture
- R - Miscellaneous

22 Textile Mill Products

Includes establishments engaged in performing any of the following operations, regardless of the type of fiber used: (1) manufacturing yarn, thread, cordage, and twine; (2) manufacturing woven fabric, carpets and rugs, braids, laces, knit fabric, knit garments, and other products from yarn; (3) dyeing and finishing fibers, yarn, and fabric, and (4) coating, waterproofing, and otherwise treating fabric. Includes establishments engaged in manufacturing felt fabrics and products.

- A - Wool
- B - Cotton
- C - Silk
- D - Synthetics
- E - Fur and Hair
- F - Other materials
- G - Scouring (includes all types of cleansing of raw materials)
- H - Bleaching
- I - Dyeing
- J - Finishing
- K - Miscellaneous processes

24 Lumber and Wood Products

Includes logging camps engaged in cutting timber and pulpwood; merchant sawmills, veneer mills, lath mills, shingle mills, cooperage-stock mills, planing mills, and plywood mills engaged in producing lumber and wood basic materials; and establishments engaged in manufacturing finished articles made

Appendix A (Cont'd.)

Major
Group
NumberDescription of Group24 Lumber and Wood Products (cont.)
(cont.)

entirely or mainly of wood or wood substitutes. Includes furniture.

26 Paper and Allied Products

Includes the manufacture of pulp primarily from wood, and from rags and other fibers; the conversion of these pulps into any kind of paper or paperboard; and the manufacture of paper and paperboard into converted paper products such as coated paper, paper bags, paper boxes, cards and envelopes.

- A - Sulphite pulp
- B - Sulphate pulp
- C - Groundwood pulp
- D - Rag Pulp
- E - Jute or hemp paper stock
- F - Reclaimed paper (includes deinking)
- G - Paper Mill
- H - Paperboard mill
- I - Miscellaneous

28 Chemicals and Allied Products

Includes establishments producing basic chemicals, and establishments manufacturing products by predominantly chemical processes. Includes manufacture of photographic chemicals. Establishments classified in this major group manufacture three general classes of products:

- A - Basic chemicals such as acids, alkalies, salts and organic chemicals
- B - Chemical products, to be used in further manufacture such as synthetic fibers, plastics materials, crude animal and vegetable oils, dry colors, and pigments;
- C - Finished chemical products to be used for ultimate consumption such as drugs, cosmetics, and soaps; or to be used as materials or supplies in other industries such as paints, fertilizers, and explosives.

Appendix A (Cont'd.)

<u>Major Group Number</u>	<u>Description of Group</u>
-----------------------------------	-----------------------------

29 Products of Petroleum and Coal

Includes establishments refining crude petroleum and manufacturing coke and coke-oven products, paving and roofing materials, and other products made from petroleum and coal. Includes establishments manufacturing and distributing gas to consumers.

- A - Crude Petroleum Refining
- B - By-product coke plants
- C - Gas plants
- D - Light oil refining
- E - Miscellaneous

30 Rubber and Rubber Products

Includes establishments refining natural rubber or manufacturing synthetic rubber. Includes establishments manufacturing from natural or synthetic rubber, gutta percha, balata, or gutta siak, all kinds of rubber products such as tires, rubber footwear, mechanical rubber goods, and rubber sundries. This group also includes establishments manufacturing reclaimed rubber or rebuilt and retreated rubber tires.

- A - Natural rubber
- B - Synthetic rubber

31 Leather and Leather Products

Includes establishments engaged in tanning, currying, and finishing hides and skins, and establishments manufacturing finished leather and artificial leather products and some similar products made of other materials.

- A - Tanning (includes Beamhouse)
- B - Dyeing and Finishing
- C - Miscellaneous

33 Primary Metal Industries

Includes establishments engaged in the smelting and refining of ferrous and non-ferrous metals from ore, pig, or scrap; in the rolling, drawing, and alloying of ferrous and non-ferrous metals; and in the manufacture of castings, forgings, and other basic products of ferrous and non-ferrous metals.

Appendix A (Cont'd.)

<u>Major Group Number</u>	<u>Description of Group</u>
-----------------------------------	-----------------------------

33 Primary Metal Industries (cont.)

- A - Ferrous
- B - Non-Ferrous
- C - Blast Furnace
- D - Smelting
- E - Rolling Mills

34 Fabricated Metal Products

Includes establishments engaged in fabricating ferrous and non-ferrous metal products such as tin cans and other tinware, hand tools, cutlery, general hardware, non-electric heating apparatus, fabricated structural metal products, metal stampings, lighting fixtures, fabricated wire products, and a variety of metal products not elsewhere classified. (Includes ordnance, machinery, and transportation equipment).

- A - Ferrous
- B - Non-Ferrous
- C - Plating
- D - Pickling
- E - Painting, or other methods of preservation
- F - Heat Treatment
- G - Cutting and lubricating oils
- H - Rolling mills
- I - Miscellaneous

39 Miscellaneous Manufacturing Industries

Includes establishments primarily engaged in manufacturing products not classified in any other manufacturing major group.

APPENDIX B

Treatment Code

The principal treatment devices and methods are identified by capital letters and are further described by subsequent lower case letters. In general, the symbols will be arranged in the order of sewage flow, with sludge treatment symbols following thereafter. Combination units performing more than one function in a single structure are denoted by enclosing the appropriate symbols in parentheses. Enclosures in brackets indicate parallel or alternate operation. Chlorination, where used is noted

Appendix B (Cont'd.)

only once for each plant, regardless whether or not actual application is made at more than one point.

KEY TO SYMBOLS

A -----Aeration
 Aa ---Activated sludge, diffused air aeration
 Ac ---Contact aerators
 Am --Activated sludge, mechanical aeration
 Ap---Aeration, plain, without sludge return
 B -----Sludge beds
 Bo ---Open
 Bc ---Glass covered
 C -----Settling tanks
 Ci ---two story (Imhoff)
 Cm --mechanically equipped
 Cp---plain, hopper bottom or intermittently drained for cleaning
 Cs ---septic tank
 Ct ---multiple tray, mechanically equipped
 D -----Digester, separate sludge
 Dc ---with cover (fixed if not otherwise specified)
 D(cg)-gasometer in fixed cover
 De---gas used in engines (heat usually recovered)
 Df ---with floating cover
 Dg ---with gasometer cover
 Dh---gas used in heating
 Dm --stirring mechanism
 Do ---open top
 Dp---unheated
 Dr ---heated
 Ds ---gas storage in separate holder
 Dt ---stage digestion
 E -----Chlorination
 Ec ---with contact tank
 Eg ---by chlorine gas
 Eh ---by hypochlorite
 F -----Filters
 Fc ---contact beds
 Fm --magnetite (straining)
 Fo ---roughing filters
 Fr ---rapid sand or other sand straining
 Fs ---intermittent sand
 Ft ---trickling (no further details)
 Fth --high capacity
 Ftlh--high capacity, single stage
 Ft2h -high capacity, two stage
 Ftn --fixed nozzle, standard capacity
 Ftr --rotary distributor, standard capacity
 Ftt---traveling distributor, standard capacity
 G -----Grit chambers
 Gh ---without continuous removal mechanism
 Gm --with continuous removal mechanism
 Gp---grit pocket at screen chamber
 Gw---separate grit washing device
 H -----Sludge storage tanks (not second stage digestion units)
 Hc ---covered

Appendix B (Cont'd.)

Hm ---with stirring or concentrating mechanism
 Ho ---open
 I -----Sewage application to land
 Ic---with cropping
 Ip---percolation beds
 Is---sub-surface application
 Iu---land underdrained
 K -----Chemical treatment - Flocculation.
 Chemical treatment-type units or equipment not necessarily complete or operated as chemical treatment
 Ka ---flocculation tank, air agitation
 Kc ---chemicals used
 Km ---flocculation tank, mechanical agitation
 Kx ---no chemicals used
 L -----Lagoons
 Le ---evaporation lagoons
 Lo ---oxidation lagoons or ponds
 Lp---lagoon for settling of sewage
 Ls ---sludge lagoons - not for treatment of sewage
 O -----Grease removal or skimming tanks - not incidental to settling tanks
 Oa ---aerated tank (diffused air)
 Om --mechanically equipped tank
 S-----Screens
 Sc ---comminutor (screenings ground in sewage stream)
 Si---intermediate screens (1/8" to 1/2" openings)
 Sf---fine screen (less than 1/8" openings)
 Sg ---screenings ground in separate grinder and returned to sewage flow
 Sh ---bar rack (1/2" to 2" openings) hand cleaned
 Sm---bar rack (1/2" to 2" openings) mechanically cleaned
 Sr ---coarse rack (openings over 2")
 St---garbage ground at plant and added to sewage flow
 T -----Sludge thickener
 Tc ---covered
 Tm --stirring mechanism
 To ---open top
 V -----Mechanical sludge dewatering
 Vc ---sludge centrifuge
 Vv ---rotary vacuum filter
 Vo ---other
 X -----Sludge disposal
 Xb ---barged to sea
 Xd ---used for fertilizer
 Xf ---burned for fuel
 Xn ---incinerated
 Xp ---used for fill
 Z -----Sludge conditioning
 Za ---chemicals used, alum
 Zc ---chemicals used (unidentified)
 Zi ---chemicals used, iron salt
 Zl ---chemicals used, lime
 Zx ---no chemicals used
 Zy ---elutriation

Industrial Waste Treatment Operations and Processes

Due to the many types of industrial wastes produced and the corresponding diversity of equipment and functional units employed in their treatment a complete and detailed code of such equipment and units was not developed for this inventory. Industrial waste treatment operations or processes have been coded, instead of the devices in which or by which such operations or processes are carried out. This procedure eliminates much detail and revision in the code developed, and in addition provides for a broader application of the code, since an operation or process may remain the same, while the unit in which it is performed may change, or may even differ in different industries.

The following numerical coding is used for the description of those situations in which the treatment of industrial wastes cannot be satisfactorily or fully described by use of the foregoing symbols alone. The preceding letter symbols and the following numerical coding are used in combination when necessary, although either may be used alone.

1. Centrifugation

Defn. Separation of solids and fluids of different densities or separation of the nature of filtration in an apparatus rotating at high speed.

Ex. Separation of wool grease from acid cracked wool scouring liquor in a centrifuge.

2. Distillation and Stripping

Defn. Distillation is a separation of volatile liquids by utilizing the differences in their volatilities. Stripping is a separation of a volatile material from a less volatile or non-volatile liquid with the aid of a stream of air or other gas.

Ex. Kopper's process for distilling phenol from ammonia-still liquor.

3. Emulsion Breaking

Defn. Separation of two liquids in colloidal suspension.

Ex. Passing oil in water of waste emulsion from the treatment of light and lubricating oils between electrodes to charge the particles and cause separation.

Appendix B (Cont'd.)

4. Evaporation

Defn. Volatilization of water or other material from nonvolatile residue.

Ex. Concentration of Steffens waste from beet sugar manufacture in multiple effect evaporators.

5. Extraction

Defn. Transferral of a constituent of a solid or liquid to another liquid (the solvent)

Ex. Extraction of phenol from ammoniacal liquor with benzene.

6. Filtration

Defn. Separation of a heterogeneous mixture of a fluid and particles of solid by a filter medium which permits the flow of a fluid but retains the particles of solid.

Ex. Use of save-alls for the removal of fiber from white water in the pulp and paper industry. Filter presses for removal of lanolin from wool scouring wastes.

7. Flotation

Defn. Separation of a material by floating at or on the surface of a liquid.

Ex. Flotation save-alls for removal of fiber and other suspended solids from white water.

8. Neutralization

Defn. Addition of acids or bases to basic or acidic material so that it is no longer acidic or basic, to get a pH value of about 7.0.

Ex. Neutralization of acid wastes resulting from the manufacture of nitrocellulose with dolomitic lime.

9. Oxidation - Chemical

Defn. Changing an element from a lower to a higher positive valance by chemical action.

Ex. Chlorination of cyanides in alkaline solution.

Appendix B (Cont'd.)

10. Regulated Discharge

Defn. The procedure or actions involved in artificially controlling the flow of liquid wastes so that their discharge at a specific time or times will serve a specified purpose or objective.

Ex. Lagooning of cannery wastes, with discharge to the stream in small volumes over long periods of time when temperatures are low and stream flows high.

11. Waste Prevention Measures

In general, good housekeeping. Definite good housekeeping practices taken by industry to prevent waste materials resulting from industrial operations from entering the sewers.

If the industry concerned is not sewered, this group includes all good housekeeping practices taken to keep waste materials from entering a watercourse.

This group does not refer to any measures otherwise considered as being treatment in these codes. (For instance, lagooning or screening).

Ex. Collection of blood and paunch manure. Burning or otherwise disposing of sawdust.

APPENDIX C

LIST OF BASINS AND SUB-BASINS

NE - Northeast

- 1 Quinnipiac River & Western Connecticut Coastal
- 2 Housatonic River
- 3 Pawcatuck River and Eastern Connecticut Coastal
- 4 Connecticut River
- 5 Thames River
- 6 Narragansett Bay
- 8 Massachusetts Coastal
- 9 Merrimac River
- 10 Piscataqua River and New Hampshire Coastal
- 12 Saco River and South Maine Coastal
- 14 Presumpscot River and Casco Bay
- 15 Androscoggin River
- 16 Kennebec and Sheepscot River
- 17 Penobscot River
- 18 North Maine Coastal

Appendix C (Cont'd.)

- 19 St. Croix River
- 20 St. Johns River
- 21 Lake Memphremagog
- 24 Lake Champlain
- 25 St. Lawrence
- 26 Lake Ontario
- 27 Lake Erie-Niagara
- 28 Genesee River
- 29 Oswego River
- 30 Mohawk River
- 31 Upper Hudson
- 32 Lower Hudson

NA - North Atlantic

- 1 New Jersey-New York Metropolitan Area
- 2 New Jersey Coast
- 3 Delaware River Basin - Zone 1
- 4 Delaware River Basin - Lehigh
- 5 Delaware River Basin - Schuylkill
- 6 Delaware River Basin - Zone 2
- 7 Delaware River Basin - Zone 3
- 8 Delaware River Basin - Zone 4
- 9 Susquehanna River Basin - North Branch
- 10 Susquehanna River Basin - West Branch
- 11 Susquehanna River Basin - Juniata
- 12 Susquehanna River Basin - Main Stem
- 13 Upper Chesapeake Bay and Maryland Delaware Coast
- 14 Potomac River Basin
- 15 Rappahannock and York River Basins - Virginia Coast
- 16 James River Basin

SE - Southeast

- 1 Chowan River Basin
- 2 Roanoke River Basin
- 3 Tar River Basin
- 4 Neuse River Basin
- 5 North Carolina Coastal Area
- 6 Cape Fear River Basin
- 7 Yadkin-Pee Dee River Basin
- 8 Pee Dee River Basin
- 9 Catawba-Waterlee River Basin
- 10 Congaree River Basin
- 11 Santee-Cooper River Basin
- 12 Edisto-Combahee River Basin
- 13 Savannah River Basin
- 14 Ogeechee River Basin
- 15 Ocomee River Basin
- 16 Ocmulgee River Basin
- 17 Altamaha River Basin
- 18 Satilla River Basin
- 19 St. Marys-Nassau River Basin
- 20 St. Johns River Basin
- 21 Suwanee River Basin
- 22 Ochlockonee-St. Marks River Basin
- 23 Withlacoochee River Basin
- 24 Tampa Bay Area
- 25 Peace River Basin

Appendix C (Cont'd.)

SE - Southeast (Cont'd.)

- 26 Kissimmee River Basin
- 27 Florida East Coastal Area
- 28 Lower Florida Area
- 29 Flint River Basin
- 30 Chattahoochee River Basin
- 31 Apalachicola River Basin
- 32 Choctawhatchee River Basin
- 33 Perdido - Escambia River Basin
- 34 Tallapoosa River Basin
- 35 Coosa River Basin
- 36 Cahaba River Basin
- 37 Alabama River Basin
- 38 Upper Tombigbee River Basin
- 39 Warrior River Basin
- 40 Lower Tombigbee River Basin
- 41 Mobile Bay Area
- 42 Pascagoula River Basin
- 43 Pearl River Basin

TR - Tennessee River

- 1 Clinch
- 2 Holston
- 3 French Broad
- 4 Little Tennessee
- 5 Hiwassee
- 6 Elk
- 7 Duck
- 8 Main Stem, Tennessee River, and Minor Tributaries

OR - Ohio River

- 1 Allegheny
- 2 Monongahela
- 3 Beaver
- 4 Muskingum
- 5 Little Kanawha
- 6 Hocking
- 7 Kanawha
- 8 Guyandot
- 9 Big Sandy
- 10 Scioto
- 11 Little Miami
- 12 Licking
- 13 Miami
- 14 Kentucky
- 15 Salt
- 16 Green
- 17 Wabash
- 18 East Fork White River
- 19 West Fork White River
- 20 Cumberland
- 21 Ohio Main Stem and Minor Tributaries
- 22 French Creek
- 23 Clarion River

Appendix C (Cont'd.)

LE - Lake Erie

- 1 Maumee
- 2 Sandusky
- 3 Cuyahoga
- 4 Lake Erie Shore Line and Minor Tributaries

UM - Upper Mississippi

- 1 Red River of the North
- 2 Rainy
- 3 Upper Portion Upper Mississippi River
- 4 Minnesota
- 5 St. Croix
- 6 Lower Portion Upper Mississippi River
- 7 Wisconsin
- 8 Mississippi-Wapsipinicon and Tributaries
- 9 Rock
- 10 Mississippi-Iowa-Cedar
- 11 Mississippi-Des Moines-Skunk
- 12 Mississippi-Salt
- 13 Chicago-Calumet
- 14 Des Plaines
- 15 Kankakee
- 16 Fox
- 17 Illinois
- 18 Mississippi-St. Louis Area
- 19 Meramec
- 20 Kaskaskia
- 21 Big Muddy
- 22 Mississippi-Cape Girardeau Area

WL - Western Great Lakes

- 23 Lake Superior
- 24 Green Bay Western Shore
- 25 Fox-Wolf
- 26 Lake Michigan Western Shore (Includes No. Suburbs of Chicago which drain to Lake)
- 27 Lake Michigan-Lake Huron North Shore
- 28 Lake Michigan Northeastern Shore
- 29 Muskegon River
- 30 Grand River
- 31 Kalamazoo
- 32 St. Joseph River
- 33 Lake Huron Western Shore
- 34 Saginaw River
- 35 St. Clair-Detroit Rivers
- 36 Lake Erie Western Shore

MR - Missouri River

- 1 Upper Missouri (Main Stem and Tributaries to below Mouth of Milk River)
- 2 Yellowstone
- 3 Missouri-Souris (Main Stem and Minor Tributaries from Mouth of Milk River)

Appendix C (Cont'd.)

MR - Missouri River (cont'd.)

- to Spring Creek including Devils Lake and Souris River)
- 4 Central Missouri (Main Stem and Tributaries from above mouth Spring Creek to Niobrara River)
- 5 Niobrara
- 6 James
- 7 Big Sioux
- 8 Lower Platte River from its origin at North Platte, Nebraska, to its mouth)
- 9 North Platte
- 10 South Platte
- 11 Kansas
- 12 Lower Missouri (Main Stem and Minor Tributaries from Niobrara River to Mouth)
- 13 Grand-Chariton
- 14 Osage-Gasconade

SM - Southwest-Lower Mississippi

- 1 Upper Arkansas River Basin Above Kans.-Colo. State Line
- 2 Arkansas River Basin-Kans.-Colo. State Line to Tulsa
- 3 Verdigris River Basin
- 4 Grand (Neosho) River Basin
- 5 White River Basin
- 6 Lower Miss. River Basin - Cairo to Helena, Arkansas
- 7 Cimarron River Basin (N. M., Colo., Kans., and Okla.)
- 8 North Canadian River Basin
- 9 Arkansas River Basin - Tulsa to Van Buren
- 10 Arkansas River Basin - Van Buren to mouth
- 11 Lower Miss. River Basin - Yazoo River
- 12 South Canadian River Basin - Above Tex.-Okla. State Line
- 13 South Canadian River Basin - Below Tex.-Okla. State Line
- 14 Washita River Basin
- 15 Upper Red River Basin - Above Denison
- 16 Lower Red River Basin - Below Denison
- 17 Ouachita River Basin
- 18 Lower Miss. River Basin - Big Black River
- 19 Atchafalaya River Basin
- 20 Calcasieu River Basin
- 21 Lower Miss. River Basin - Natchez to Gulf

CR - Colorado River

- 1 Lower Colorado River Basin
- 2 Middle Colorado River Basin
- 3 Upper Colorado River Basin
- 4 Gila River Basin

Appendix C (Cont'd.)

- 5 Little Colorado River Basin
- 6 San Juan River Basin
- 7 Green River Basin

WG - Western Gulf

- 1 Sabine River Basin
- 2 Neches River Basin
- 3 Trinity and San Jacinto River Basin
- 4 Brazos River Basin
- 5 Colorado River Basin
- 6 Guadalupe, Lavaca, and San Antonio River Basin
- 7 Nueces River Basin
- 8 Pecos River Basin
- 9 Rio Grande Basin (Upper) above Pecos River
- 10 Rio Grande Basin (Lower) below Pecos River

PN - Pacific Northwest

- 1 Kootenai River Basin
- 2 Clark Fork-Pend Oreille River Basin
- 3 Spokane River Basin
- 4 Yakima River Basin
- 5 Columbia River Basin Above Yakima River
- 6 Upper Snake River Basin
- 7 Central Snake River Basin
- 8 Middle and Lower Snake River Basin
- 9 Willamette River Basin
- 10 Columbia River Basin Below Yakima River
- 11 Puget Sound Basin
- 12 Washington Coast Basin
- 13 Oregon Coast Basin
- 14 Southern Oregon Lakes Basin
- 15 Alaska

CL - California

- 1 Klamath River
- 2 North Coastal
- 3 San Francisco Bay Region
- 4 Central Coastal
- 5 Santa Clara River
- 6 Los Angeles River
- 7 Santa Ana River
- 8 San Diego
- 9 Sacramento River
- 10 San Joaquin River
- 11 Kings and Kern Rivers and Tulare Lake

GB - Great Basin

- 1 Northwestern Lahontan
- 2 Humboldt River
- 3 Central Nevada
- 4 Owens River
- 5 Mojave

Appendix C (Cont'd.)

Appendix C (Cont'd.)

GB - Great Basin (Cont'd.)

- 6 Colorado River Basin Region of California
- 7 Great Salt Lake
- 8 Sevier River

HA - Hawaii

- 1 Hawaii
- 2 Kuai
- 3 Maui
- 4 Oahu

APPENDIX D

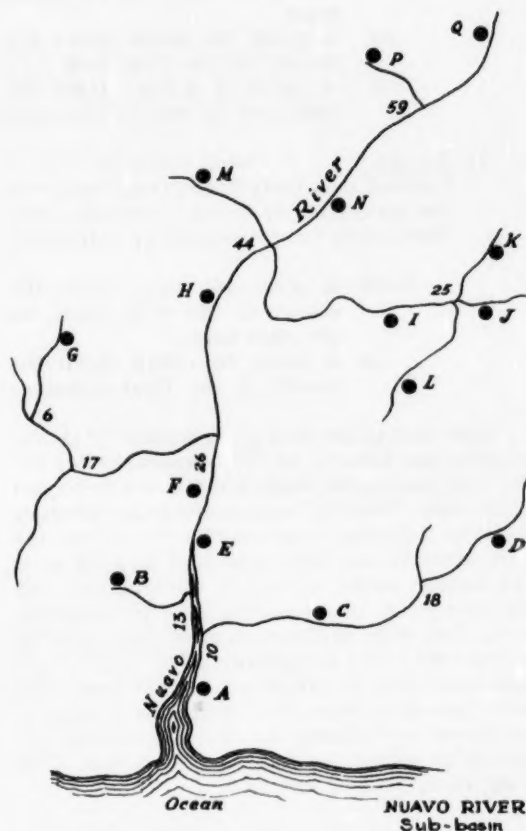
The watercourse mileage system is illustrated with reference to the accompanying diagram of the (hypothetical) Nuavo River sub-basin.

The main stem of the sub-basin, together with those tributaries on which sources of pollution are located, are shown. Tributaries entering the main stem are located by mileages above the mouth of the main stem. Sub-tributaries are located by mileages above the mouth of the tributary into which they discharge, tertiary tributaries by mileages above the mouth of the sub-tributary into which they discharge, and so on for fourth, fifth, etc., tributaries.

The watercourse mileage coding for each source of pollution on this river system is shown in the following table:

Source of Pollution	Watercourse Mileage
A	N5
B	N13-6
C	N10-10
D	N10-18-9
E	N18
F	N22
G	N26-17-6-5
H	N35
I	NR44-23
J	NR44-28
K	NR44-L25-6
L	NR44-R25-6
M	NL44-6
N	N52
P	N59-5
Q	N67

In each code symbol a letter - "N" in this case - appears first to denote the main stem concerned. The letter symbol is followed by numbers which locate by river mileage the particular source of pollution.



Appendix D (Cont'd.)

The coding for three sources of pollution from the table is discussed more fully below:

- 1) Source D Code: N10-18-9
This source of pollution is located on a second tributary, which enters the first tributary 18 miles above its mouth. The first tributary, in turn, enters the main stem 10 miles above its mouth. The coding for "D" is then made up as follows:

- N10 Indicates a point 10 miles above the mouth of the main stem
- 18 A point 18 miles above the mouth of the first tributary
- 9 A point 9 miles above the mouth of the second tributary

- 2) Source J Code: NR44-28
Located on a first tributary which enters the main stem 44 miles above its mouth. The coding for "J" is made up as follows:

- NR44 A point 44 miles above the mouth of the main stem, on the right bank.
- 28 A point 28 miles above the mouth of the first tributary

Note that in the coding for source "J" above, an additional letter - an "R" - appears after the "N" designating the main stem in the first part of the code. This "R" signifies that the tributary carrying pollution from source "J" enters the main stem on the right side, looking upstream. The second letter serves to differentiate this tributary from that entering directly opposite, on the left side of the main stem (see code for source "M".) The designations "R" and "L" are necessary only in situations of this type. The same principle may also be applied to similar conditions on tributaries, always looking upstream to define the right and left banks. This is shown in the next example.

- 3) Source L Code: NR44-R25-6
Located on a second tributary which enters the first tributary 25 miles above its mouth. The coding for source "L" is made up as follows:

- NR44 A point 44 miles above the mouth of the main stem, on the right bank.
- R25 A point 25 miles above the mouth of the first tributary, on the right bank.
- 6 A point 6 miles above the mouth of the second tributary.

In this case the "R" designation is necessary in the mileage coding of the first tributary since at this point another second tributary enters on the opposite (left) bank. Note that the coding for source "K" (NR44-L25-6) differs from that for source "L" only by the fact that it is located on a tributary entering on the left bank - looking upstream - of the first tributary.

In those cases where two or more main stems are located in one sub-basin, differentiation is made by the first letter of the code, i.e., the "N" in this case would distinguish sources of pollution on the Nuavo River from those on, say, the Cling River, if the latter was also in this sub-basin.

It may happen that two rivers having the same initial letter lie in the same sub-basin. In this case, a second letter will be used for distinction. Thus if, in addition to the Nuavo, the North River was also a main stem in this sub-basin, the Nuavo could be coded as given i.e., "N" while the North could be coded as "NO".

Major points to be reiterated are:

- 1) All mileages in the code are river mileages.
- 2) The zero point for mileages on the main stem is at the mouth of the main stem. The zero point for mileages on a tributary is at the mouth of the tributary.
- 3) For uniformity, right and left banks of the main stem and tributaries are located by looking upstream on the main stem or tributary concerned.

INVENTORY OF MUNICIPAL AND INDUSTRIAL WASTE FACILITIES

Discharge to the St. Lawrence River			STATE NEW YORK			YEAR 1957	PAGE 1 of 2	
COMMUNITY, SEWER OR SANITARY DISTRICT INSTITUTION OR INDUSTRY	1950 POPULATION	ESTIMATED POPULATION SERVED	TYPE SEWER SYSTEM	IND. GROUP WASTE CLASS.	TREATMENT FACILITIES			LINE No.
	ESTIMATED POPULATION				Treatment	Discharge to		
	NUMBER OF PLANT EMPLOYERS							
1	2	3	4	5	6	7	8	
ALBANY	Veteran's Hospital	-	700	x	x	x	Raquette River	1
		800-7	-	-	-	(Primary)	-	
BANGOR		-	100	S	-	-	None	2
		x	-	-	-	-	East Branch of Little Salmon R.	
BANGOR	Bangor Coop. Cheese	5	-	20	x	-	None	3
		-	-	I	-	-	East Branch of Little Salmon R.	
BANGOR (T)	General Ice Cream	25	-	20	x	x	L	4
		-	-	K	-	x	West Branch of Deer Creek	
BLUE MOUNTAIN LAKE		-	100	S	x	x	Eg	5
		100-2	-	-	-	x	Raquette River	
BRAINARDSVILLE		-	125	x	x	-	None	6
		225-1	-	-	-	-	Chateaugay River	
CANTON		4,379	4,300	S	x	5.0	Grasse River	7
		-	-	-	-	0.5	ShEgCnDpSc	
CANTON	St. Lawrence University	-	310	S	x	0.31	CsEc	8
		1,234	1,200	C	x	-	None	9
CHATEAUGAY		-	-	-	-	-	Marble River	
CLIFTON	Jones & Laughlin Ore Company	300	-	10	x	x	L	10
		-	-	x	-	x	Little River	
DANFORTH	Republic Steel Corporation	400	-	34	x	-	None	11
		-	-	x	-	-	Separator Brook	
DEKALB	DeKalb Creameries Incorporated	20	-	20	x	x	Cs	12
		-	-	I	-	x	Anderson Creek	
DEKALB	DeKalb Creameries Incorporated	-	x	S	x	x	Cs	13
		-	-	-	-	x	Anderson Creek	
DIANA	Harrisville Paper Corporation	100	-	26	x	-	None	14
		-	-	G	-	-	West Branch	
DIANA	Harrisville Paper Corporation	-	100	S	x	-	None	15
		-	-	-	-	-	West Branch	
FINE	Altmont Milk Company	5	-	20	x	-	None	16
		-	-	HI	-	-	Oswegatchie River	
FOWLER (T)	St. Joseph Lead Company	250	-	34	x	-	L	17
		-	-	x	-	x	Turnpike Creek	
FOWLER (T)	St. Joseph Lead Company	-	250	S	x	-	L	18
		-	-	-	-	x	Turnpike Creek	
GOVERNOR		4,916	4,000	S	x	-	None	19
		-	-	-	-	-	Oswegatchie River	
GOVERNOR (T)	Rushmore Mills Incorporated	100	-	26	x	-	None	20
		-	-	x	-	-	Oswegatchie River	
HOLANDSBURG (T)	St. Regis Mohawk Indian School	-	400	S	x	x	Cs	21
		400-2	-	-	-	x	St. Regis River	
LAWRENCE (T)	General Ice Cream Company	40	-	20	x	-	None	22
		-	-	K	-	-	Deer Creek	
LEROY (T)	Borden Milk Company	50	-	20	x	-	None	23
		-	-	H	-	-	Indian River	
MALONE		9,501	7,800	S	x	11.0	Salmon River	24
		-	-	-	-	1.375	ShOaCmJerBo	
MASSENA		13,137	3,000	S	x	-	None	25
		-	-	-	-	-	Raquette River	
MASSENA		-	12,000	S	x	-	None	26
		-	-	-	-	-	Grasse River	
MASSENA	Alcoa	-	5,000	S	x	-	None	27
		5,000-7	-	-	-	-	Grass River	
MASSENA	Dairyman's League Coop. Association	25	-	20	x	-	None	28
		-	-	H	-	-	Raquette River	
MASSENA	Dairyman's League Coop. Association	-	25	S	x	-	None	29
		-	-	-	-	-	Raquette River	
MORRISTOWN	McAdam Cheese Company	12	-	20	x	-	None	30
		-	-	I	-	-	St. Lawrence River	

INVENTORY OF MUNICIPAL AND INDUSTRIAL WASTE FACILITIES

										STATE	YEAR	PAGE
										NEW YORK	1957	1 of 2
LINE No.	DRAINAGE BASIN	WATER-COURSE MILEAGE	P.E. (800)		STREAM FLOW FOR DESIGN		DURATION (Days)	FLOODING FREQUENCY (Years)	DOWNSTREAM WATER USE	PRELIMINARY	REMARKS	ADDITIONAL COMMENTS
			UNTREATED WASTE	DISCHARGED WASTE	MINIMUM FLOW CFS	MAXIMUM FLOW CFS						
			11	12	13	14	15	16	17	18		
1	NE	x	700	x	x	7	x					
25	-	-	280	-	x	-	-					
2	NE	x	100	x	x	0	x					
25	-	-	100	-	x	-	-					
3	NE	x	2,100	x	x	0	x					
25	-	-	2,100	-	x	-	-					
4	NE	x	x	x	x	7	x					
25	-	-	x	-	x	-	-					
5	NE	x	100	x	x	7	x					
25	-	-	40	-	x	-	-					
6	NE	x	x	x	x	0	x					
25	-	-	x	-	x	-	-					
7	NE	x	x	x	x	7	x					
25	-	-	3,000	-	x	-	-					
8	NE	x	x	x	x	7	x					
25	-	-	x	-	x	-	-					
9	NE	x	15,000	x	x	0	x					
25	-	-	15,000	-	x	-	-					
10	NE	x	x	x	x	4	x					
25	-	-	x	-	x	-	-					
11	NE	x	x	x	x	0	x					
25	-	-	x	-	x	-	-					
12	NE	x	640	x	x	4	x					
25	-	-	640	-	x	-	-					
13	NE	x	x	x	x	4	x					
25	-	-	x	-	x	-	-					
14	NE	x	3,300	x	x	0	x					
25	-	-	3,300	-	x	-	-					
15	NE	x	x	x	x	0	x					
25	-	-	x	-	x	-	-					
16	NE	x	2,100	x	x	0	x					
25	-	-	2,100	-	x	-	-					
17	NE	x	x	x	x	7	x					
25	-	-	x	-	x	-	-					
18	NE	x	x	x	x	7	x					
25	-	-	x	-	x	-	-					
19	NE	x	4,000	x	x	0	x					
25	-	-	4,000	-	x	-	-					
20	NE	x	4,500	x	x	0	x					
25	-	-	4,500	-	x	-	-					
21	NE	x	400	x	x	7	x					
25	-	-	240	-	x	-	-					
22	NE	x	1,200	x	x	0	x					
25	-	-	1,200	-	x	-	-					
23	NE	x	900	x	x	0	x					
25	-	-	900	-	x	-	-					
24	NE	x	x	x	x	2	x					
25	-	-	5,280	-	x	-	-					
25	NE	x	4,000	x	x	0	x					
25	-	-	4,000	-	x	-	-					
26	NE	x	12,000	x	x	0	x					
25	-	-	12,000	-	x	-	-					
27	NE	x	1,700	x	x	0	x					
25	-	-	1,700	-	x	-	-					
28	NE	x	750	x	x	0	x					
25	-	-	750	-	x	-	-					
29	NE	x	750	x	x	0	x					
25	-	-	750	-	x	-	-					
30	NE	x	x	x	x	0	x					
25	-	-	5,700	-	x	-	-					

INVENTORY OF MUNICIPAL AND INDUSTRIAL WASTE FACILITIES

Discharge to the St. Lawrence River			STATE NEW YORK		YEAR 1957		PAGE 2 of 2		
COMMUNITY, SEWER OR SANITARY DISTRICT INSTITUTION OR INDUSTRY	1950 POPULATION	ESTIMATED POPULATION SERVED	TYPE SEWER SYSTEM	AVERAGE DAILY FLOW MGD	TREATMENT FACILITIES			LINE No.	
	ESTIMATED POPULATION				Discharge to	Treatment			
	NUMBER OF PLANT EMPLOYEES	WASTE CLASS.	Disch'd for P.E. (1950's)	Average daily flow MGD					
1	2	3	4	5	6	7	8		
NEWTOWN FALLS	Newtown Falls Paper Company	300	-	26 G	x -	- -	None	Oswegatchie River	1
NEWTOWN FALLS	Newtown Falls Paper Company	-	300	S -	x -	- -	None	Oswegatchie River	2
NORFOLK		1,252	1,000	S -	x -	1.0 0.1	ShCsEgBo	Raquette River	3
NORFOLK	Hood Milk Company	20	-	20 J	x -	- -	None	Raquette River	4
NORFOLK	St. Regis Paper Company	250	-	26 A	x -	- -	None	Raquette River	5
NORFOLK	St. Regis Paper Company	-	250	S -	x -	- -	None	Raquette River	6
NORFOLK		1,995	1,500	S -	x -	- -	None	Raquette River	7
OGDENSBURG		16,166	16,345	C -	x -	- -	None	St. Lawrence River	8
OGDENSBURG	State Hospital	2,000-2	2,000	S -	x -	- -	None	St. Lawrence River	9
OSWEGATCHIE	Alsie Brothers	50	-	20 I	x -	- -	None	Oswegatchie River	10
OSWEGATCHIE	Dairymen's League Coop. Association	12	-	20 H	x -	- -	None	Oswegatchie River	11
OSWEGATCHIE	Diamond Hatch Company	725	-	26 CG	x -	- -	None	St. Lawrence River	12
OSWEGATCHIE	Sheffield Farms Company	20	-	20 I	x -	- -	None	Oswegatchie River	13
OSWEGATCHIE	Western Condensing Co.	118	-	20 x	x -	- -	None	Oswegatchie River	14
POTSDAM		7,491	4,820	CS -	x -	- -	None	Raquette River	15
POTSDAM (T)	Raquette River Paper Company	300	-	26 A	x -	- -	None	Raquette River	16
POTSDAM (T)	Raquette River Paper Company	-	300	S -	x -	- -	None	Raquette River	17
THERESA (T)	Sheffield Farms	15	-	20 H	x -	- -	None	Indian River	18
THERESA (T)	Sheffield Farms	-	15	S -	x -	- -	None	Indian River	19
TUPPER LAKE		5,441	1,800	S -	x -	- -	None	Raquette Pond	20
WADDINGTON		819	100	S -	x -	x 0.01	CsBo	Sucker Brook	21
WADDINGTON	Raw Discharge	-	600	S -	x -	- -	None	St. Lawrence River	22
WADDINGTON	Waddington Mills Company	25	-	20 H	x -	- -	None	St. Lawrence River	23
WADDINGTON	Waddington Mills Company	-	25	S -	x -	- -	None	St. Lawrence River	24
WILNA	Dairymen's League Coop. Association	8	-	20 H	x -	- -	None	Indian River	25

INVENTORY OF MUNICIPAL AND INDUSTRIAL WASTE FACILITIES

										STATE	YEAR	PAGE
										NEW YORK	1957	2 of 2
LINE No.	DRAINAGE BASIN	WATER-COURSE MILEAGE	P.E. (BOD)		STREAM FLOW FOR DESIGN		POLLUTION ABATEMENT NEEDS	DOWNSTREAM WATER USE	PRELIMINARY FUTURE	REMARKS	ADDITIONAL COMMENTS	
			UNTREATED WASTE	DISCHARGED WASTE	MINIMUM FLOW CFS	Duration (Days)						
						Frequency (Years)						
9	10	11	12	13	14	15	16	17				
1	NE	x	1,800	x	x	0	x					
25	-	-	1,800	-	x	-	-					
2	NE	x	x	x	x	0	x					
25	-	-	x	-	-	-	-					
3	NE	x	1,000	x	x	7	x					
25	-	-	600	-	x	-	-					
4	NE	x	8,400	x	x	0	x					
25	-	-	8,400	-	x	-	-					
5	NE	x	128,000	x	x	0	x					
25	-	-	128,000	-	x	-	-					
6	NE	x	128,000	x	x	0	x					
25	-	-	128,000	-	x	-	-					
7	NE	x	1,500	x	x	0	x					
25	-	-	1,500	-	x	-	-					
8	NE	x	x	x	x	0	x					
25	-	-	20,000	-	x	-	-					
9	NE	x	2,000	x	x	0	x					
25	-	-	2,000	-	x	-	-					
10	NE	x	20,800	x	x	0	x					
25	-	-	20,800	-	x	-	-					
11	NE	x	360	x	x	0	x					
25	-	-	360	-	x	-	-					
12	NE	x	x	x	x	0	x					
25	-	-	457,000E	-	x	-	-					
13	NE	x	800	x	x	0	x					
25	-	-	800	-	x	-	-					
14	NE	x	1,800	x	x	0	x					
25	-	-	1,800	-	x	-	-					
15	NE	x	10,000	x	x	0	x					
25	-	-	10,000	-	x	-	-					
16	NE	x	210,000	x	x	0	x					
25	-	-	210,000	-	x	-	-					
17	NE	x	210,000	x	x	0	x					
25	-	-	210,000	-	x	-	-					
18	NE	x	6,000	x	x	0	x					
25	-	-	6,000	-	x	-	-					
19	NE	x	x	x	x	0	x					
25	-	-	x	-	x	-	-					
20	NE	x	1,800	x	x	0	x					
25	-	-	1,800	-	x	-	-					
21	NE	x	x	x	x	7	x					
25	-	-	x	-	x	-	-					
22	NE	x	600	x	x	0	x					
25	-	-	600	-	x	-	-					
23	NE	x	1,000	x	x	0	x					
25	-	-	1,000	-	x	-	-					
24	NE	x	x	x	x	0	x					
25	-	-	x	-	x	-	-					
25	NE	x	240	x	x	0	x					
25	-	-	240	-	x	-	-					
26												
27												
28												
29												
30												